

Beam Cerenkov

Current Status

- 2 heads are in MC7
- We have 4 mirrors +
- We have 2 of 4 phototubes
- Some Parts are missing
- Only one has motor Control

New Calculations

- See MIPP website for details
- Beam requirement of $< 1 \text{ mr}$ angular dispersion
- Angle thresholds set at 5 mr and 7 mr
- Pipe length of 8.8 m ($10''$) and 24.5 m ($10''$, $1\frac{1}{2}''$)
- 2 of $3/4$ gasses selected.

Running Modes

π -K identification with 24.5m radiator and 5mr threshold.

5-20 GeV	Freon 114	threshold mode
25-65 GeV	N ₂	start of differential mode
70-120 GeV	He	Differential mode

K-p identification with 8.8m radiator and 7mr thres.

5 GeV	—	timing
10 GeV	Freon 114	Timing + Threshold.
15-20 GeV	Freon 114	Threshold mode
25-40 GeV	N ₂	Threshold mode
45-120 GeV	N ₂	Differential mode
100-120 GeV	Ne	Differential mode

To Do

- Test phototubes and get 2 more
- Clean/Inspect/Recoat mirrors
- Design/Build stands
- Build Gas system and Controller
- Make ~~the~~ both heads motor controlled
- Clean
- Look at \vec{B} near TPC end
- Pick high n gas CyF_{10} 1 load @ 0.5 bar
for both heads
is 37 lbs (3.2 m³)
\$35/lb \Rightarrow \$1300/load